

REMARKS

Applicants appreciate the courtesy of Examiner Schwartz for reviewing a draft amendment, and indicating that the amendment overcomes the Sato reference in a telephone conversation on February 19, 2008 with Applicants' representative. The same claim amendment is submitted herewith as a formal Amendment, and is filed with an RCE.

Claims 1-53 are pending in the application. Claim 20 has been amended to overcome the claim objection, in the manner recommended by the Examiner. Independent claims 1 and 34 have been amended to recite that each pupil-illuminating light beam has a portion directed at a pupil of an eye, and this portion is aligned with an optical axis of an image detector and illuminates the pupil. The amendments are fully supported by the application as originally filed (see, e.g., specification at page 17, lines 7-15; and FIG. 1).

For example, referring to FIG. 1 of the application, an illuminating light beam 122 is partially reflected by a beam splitter 104, and a portion of the light beam is directed toward a pupil 134 of an eye 120, where this portion is aligned with an optical axis of a camera module 102 (see, e.g., specification at page 17, lines 7-15; and FIG. 1).

Claims 1-3, 6-8, 14, 18-22, 31-38, 40, and 42-46 were rejected under 35 USC 102(b) as being anticipated by U.S. Patent 5,526,089 to Sato et al. ("Sato"). This rejection is respectfully traversed.

Regarding the rejection of independent claims 1 and 34 over Sato, the Sato reference does not teach or suggest a system or method for tracking the eye of a user in which each pupil-illuminating light beam has a portion directed at the pupil of an eye, and this portion is aligned with an optical axis of an image detector (see independent claims 1 and 34).

On page 2, last paragraph of the Office Action of 11/19/2007, light sources 120 of Sato were cited as allegedly corresponding to the Applicants' claimed "at least one pupil-illuminating light source."

In Sato, a plurality of light sources 120 are positioned around an eyepiece lens 112 "for detecting the boundary between the pupil and the iris" (see column 4, lines 42-45 of Sato).

However, the light sources 120 of Sato do not emit light beams that each include "a portion being directed at the pupil of said eye, the portion being aligned with the optical axis of said image detector," as recited in independent claims 1 and 34.

In Sato, the light sources 120 directly illuminate the eye 113, but do not emit light beams that each have a portion aligned with an optical axis of a photoelectric converting element 117 (see column 4, lines 42-58 of Sato).

Further, as shown in FIG. 12 of Sato and described in column 7, lines 22-36, the system of Sato does not illuminate the pupil itself, but instead uses "boundaries d1, d2 of a recess in the output of the light-receiving unit 6" to determine the center of the pupil. In other words, in Sato, the pupil is depicted as a dark region. In contrast, the Applicants' claimed optical arrangement illuminates the pupil and detects the center of the pupil as a bright region.

For at least the reasons discussed above, the Sato reference does not anticipate or otherwise render obvious the Applicants' claimed invention. Therefore, independent claims 1 and 34 and their respective dependent claims are patentable over Sato.

It is believed that the claims are in condition for immediate allowance, which action is earnestly solicited.

Respectfully submitted,

/Steven M. Jensen/

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Steven M. Jensen
(Reg. No. 42,693)
Edwards Angell Palmer & Dodge
P.O. Box 55874
Boston, MA 02205

Phone: (617) 239-0100

Customer No. 21874